

**SUNSHADE STRUCTURE**  
**BACKGROUND OF THE INVENTION**

**1. Field of the Invention**

The present invention relates to a sunshade structure, and more particularly to a sunshade structure having a hidden lift cord so as to enhance the lifetime of the sunshade structure.

**2. Description of the Related Art**

A conventional sunshade structure in accordance with the prior art shown in Figs. 6-8 comprises a base 5, a fixing seat 51 mounted on the base 5, an upright bar 6 having a first end mounted on the fixing seat 51, a reel 61 mounted on a mediate portion of the upright bar 6, a connecting member 62 having a first end mounted on a second end of the upright bar 6, a first pulley 612 mounted on the connecting member 62, a transverse bar 7 having a first end mounted on a second end of the connecting member 62, a support member 71 mounted on a second end of the transverse bar 7, a second pulley 614 mounted on the support member 71, a canopy 8 mounted on and supported by the support member 71, and a lift cord 611 reeved through the first pulley 612 and the second pulley 614 and having a first end mounted on the reel 61 and a second end connected to the canopy 8 to expand or fold the canopy 8 by operation of the reel 61. However, the lift cord 611 is protruded outward from the upright bar 6 as shown in Fig. 8, so that the lift cord 611 is exposed to the ambient environment, thereby decreasing the lifetime of the lift cord 611.

## **SUMMARY OF THE INVENTION**

The primary objective of the present invention is to provide a sunshade structure having a hidden lift cord so as to enhance the lifetime of the sunshade structure.

5           Another objective of the present invention is to provide a sunshade structure, wherein the lift cord is mounted in and protected by the mounting post of the upright bar and the mounting post of the transverse bar, so that the lift cord is entirely hidden in the upright bar and the transverse bar without being exposed to the ambient environment, so as to enhance the lifetime of the  
10 lift cord.

A further objective of the present invention is to provide a sunshade structure, wherein the lift cord is guided by the mounting post of the upright bar and the mounting post of the transverse bar, thereby facilitating movement of the lift cord.

15           In accordance with the present invention, there is provided a sunshade structure, comprising:

an upright bar;

a reel mounted on a mediate portion of the upright bar;

a connecting member having a first end mounted on an end of the

20 upright bar;

a transverse bar having a first end mounted on a second end of the connecting member;

a support member mounted on a second end of the transverse bar;  
a canopy mounted on and supported by the support member; and  
a lift cord mounted in the upright bar and the transverse bar and  
having a first end mounted on the reel and a second end connected to the  
5 canopy.

Further benefits and advantages of the present invention will become  
apparent after a careful reading of the detailed description with appropriate  
reference to the accompanying drawings.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

10 Fig. 1 is a perspective view of a sunshade structure in accordance  
with the preferred embodiment of the present invention;

Fig. 2 is a side plan view of the sunshade structure as shown in Fig. 1;

Fig. 3 is a plan cross-sectional view of the sunshade structure taken  
along line 3-3 as shown in Fig. 1;

15 Fig. 4 is a partially cut-away enlarged perspective cross-sectional  
view of the sunshade structure as shown in Fig. 1;

Fig. 5 is an exploded perspective view of the sunshade structure as  
shown in Fig. 4;

Fig. 6 is a perspective view of a conventional sunshade structure in  
20 accordance with the prior art;

Fig. 7 is a side plan view of the conventional sunshade structure as  
shown in Fig. 6; and

Fig. 8 is a plan cross-sectional view of the conventional sunshade structure taken along line 8-8 as shown in Fig. 6.

### **DETAILED DESCRIPTION OF THE INVENTION**

Referring to the drawings and initially to Figs. 1-3, a sunshade structure in accordance with the preferred embodiment of the present invention comprises a base 1, a fixing seat 11 mounted on the base 1, a substantially rectangular wooden upright bar 2 having a first end mounted on the fixing seat 11, a reel 21 mounted on a mediate portion of the upright bar 2, a substantially L-shaped connecting member 22 having a first end mounted on a second end of the upright bar 2, a substantially rectangular wooden transverse bar 3 having a first end mounted on a second end of the connecting member 22, a support member 31 mounted on a second end of the transverse bar 3, a canopy 4 mounted on and supported by the support member 31, and a lift cord 211 mounted in the upright bar 2 and the transverse bar 3 and having a first end mounted on the reel 21 and a second end connected to the canopy 4 to expand or fold the canopy 4 by operation of the reel 21.

Referring to Figs. 1-5, a substantially rectangular hollow mounting post 24 is mounted in the upright bar 2 for mounting the lift cord 211. Preferably, the upright bar 2 has a side formed with a substantially rectangular receiving channel 23 for receiving the mounting post 24. In addition, the receiving channel 23 of the upright bar 2 has a side formed with a locking groove 231, and the mounting post 24 has a side formed with a protruding

locking strip 241 locked in the locking groove 231 of the upright bar 2. Preferably, the locking strip 241 of the mounting post 24 has a periphery formed with a plurality of wedge-shaped locking teeth 242 engaged with a peripheral wall of the locking groove 231 of the upright bar 2, so that the  
5 locking strip 241 of the mounting post 24 is positioned in the locking groove 231 of the upright bar 2 rigidly and stably.

Similarly, a substantially rectangular hollow mounting post 34 is mounted in the transverse bar 3 for mounting the lift cord 211. Preferably, the transverse bar 3 has a side formed with a substantially rectangular receiving  
10 channel 33 for receiving the mounting post 34. In addition, the receiving channel 33 of the transverse bar 3 has a side formed with a locking groove 331, and the mounting post 34 has a side formed with a protruding locking strip 341 locked in the locking groove 331 of the transverse bar 3. Preferably, the locking strip 341 of the mounting post 34 has a periphery formed with a  
15 plurality of wedge-shaped locking teeth 342 engaged with a peripheral wall of the locking groove 331 of the transverse bar 3, so that the locking strip 341 of the mounting post 34 is positioned in the locking groove 331 of the transverse bar 3 rigidly and stably.

Accordingly, the lift cord 211 is mounted in and protected by the  
20 mounting post 24 of the upright bar 2 and the mounting post 34 of the transverse bar 3, so that the lift cord 211 is entirely hidden in the upright bar 2 and the transverse bar 3 without being exposed to the ambient environment, so

as to enhance the lifetime of the lift cord 211. In addition, the lift cord 211 is guided by the mounting post 24 of the upright bar 2 and the mounting post 34 of the transverse bar 3, thereby facilitating movement of the lift cord 211.

Although the invention has been explained in relation to its preferred  
5 embodiment(s) as mentioned above, it is to be understood that many other possible modifications and variations can be made without departing from the scope of the present invention. It is, therefore, contemplated that the appended claim or claims will cover such modifications and variations that fall within the true scope of the invention.